AMENDMENTS TO THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 5 without prejudice or disclaimer. Please AMEND claims 1, 4, and 6 to read as follows:

1.   (Currently Amended) A method of preventing an adjacent track erase effect due to a magnetic head, the method comprising:

receiving a write command~~,~~;

measuring an ambient temperature of a hard disc drive~~,~~; and

determining whether the ambient temperature exceeds a stored threshold temperature; and if the ambient temperature exceeds the threshold temperature, determining a position of the magnetic head and adjusting ~~the~~ an intensity of a write current according to the position of ~~a~~ the magnetic head ~~of the hard disc drive~~;

determining whether an overshoot value of the write current exceeds a stored threshold overshooting value and if ~~an~~ the overshooting value ~~of the write current~~ exceeds ~~a~~ the ~~predetermined steady-state~~ stored overshoot value, adjusting the overshooting value of the write current; and

applying the adjusted write current intensity and the adjusted overshooting value to the magnetic head.

2.   (Original)   The method of claim 1, wherein the predetermined steady-state value is standardized depending on characteristics of the magnetic head, the ambient temperature of the hard disc drive, and a bit error rate of the hard disc drive.

3.   (Original)   The method of claim 1, wherein an N-time writing operation is repeated M times on the magnetic disc via the magnetic head to which the write current is applied, wherein N and M are natural numbers.

4.   (Currently Amended) A controlling apparatus of a hard disc drive for preventing

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an adjacent track erase effect, the controlling apparatus comprising:

a temperature sensor that receives a write command and measures an ambient temperature of a hard disc drive;

a controller that controls intensity of a write current and an overshooting value of the write current depending on the sensed ambient temperature of the hard disc drive and the position of the magnetic head; and

a write driver that supplies the write current having the adjusted intensity and overshooting value to the magnetic head,

wherein the controller repeats an N-time writing operation M times via the magnetic head to which the write current is applied, wherein N and M are natural numbers.

5.   (Cancelled)

6.   (Currently Amended) A computer-readable recording medium on which a program for executing a method of preventing an adjacent track erase effect is recorded, the method comprising:

receiving a write command~;

measuring an ambient temperature of a hard disc drive~;and

determining whether the ambient temperature exceeds a stored threshold temperature; and if the ambient temperature exceeds the stored threshold temperature, determining a position of the magnetic head and adjusting the an intensity of a write current according to the position of a the magnetic head of the hard disc drive;

determining whether an overshoot value of the write current exceeds a stored threshold overshooting value and if an the overshooting value of the write current exceeds a predetermined steady-state the stored overshoot value, adjusting the overshooting value of the write current; and

applying the adjusted write current intensity and the adjusted overshooting value to the magnetic head.

7.   (Original)   A hard disc drive controlling apparatus for preventing an adjacent track erase effect, the controlling apparatus comprising:

a controller device receiving a write command from a host computer;

a writing device applying a write current to a magnetic disc head in response to the write

command;

a memory device storing a predetermined threshold value and a threshold overshooting value;

a temperature sensor device sensing a temperature of the hard disc drive, wherein if the sensed temperature exceeds the predetermined threshold value, the controller device determines a position of the magnetic disc head and adjusts the intensity of the write current; and

wherein if the overshooting value of the write current exceeds the threshold overshooting value, the controller device adjusts the overshooting value of the write current.

8.   (Original)   The apparatus according to claim 7, further comprising a read preamplifier and write driver device, coupled to the controller, for reading and amplifying signals from a disc.

9.   (Original)   The apparatus according to claim 7, further comprising a read/write channel device, coupled to the controller, for reading or writing data from or onto a disk.

10.   (Original)   The apparatus according to claim 7, further comprising a voice coil motor driver supplying a drive current to a voice coil.

11.   (Original)   The apparatus according to claim 7, wherein the controller comprises a microprocessor, a digital signal processor, or a microprocessor.

12.   (Original)   The apparatus according to claim 7, wherein the memory device comprises a ROM, a flash memory, a RAM, or a buffer memory.

13.   (Original)   A computer readable code for preventing an adjacent track erase effect of a hard disc drive according to a method, the method comprising:

applying a write current to a magnetic disc head in response to a write command from a host computer;

sensing a temperature of the hard disc drive;

determining if the sensed temperature of the hard disc drive exceeds a threshold

temperature, wherein if the sensed temperature exceeds the threshold temperature, determining a position of the magnetic disc head and adjusting an intensity of the write current according to the position of the magnetic disc head, and

determining if an overshooting value of the write current exceeds a threshold overshooting value, wherein if the overshooting value of the write current exceeds the threshold value, adjusting the overshooting value of the write current.